Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of:	)	
	)	
Preserving the Open Internet	)	GN Docket No. 09-191
	)	
Broadband Industry Practices	)	WC Docket No. 07-52

MANUFACTURER COALITION COMMENTS

These comments respond to one of the rules the Commission proposes to adopt in this proceeding. That rule would require that ISPs treat all web content and service providers in the same manner. It would do so by prohibiting any discrimination in favor of one or more content or service owners, other than discrimination reasonably necessary to reduce network congestion or prevent the transmission of unlawful or harmful content. We oppose adoption of the rule as proposed and instead believe that if the Commission thinks a rule barring discrimination is desirable, it should prohibit only unreasonable discrimination since many types of discrimination are desirable and since barring reasonable discrimination would threaten innovation and investment in both web content and services as well as in broadband infrastructure as we discuss below. The position of manufacturing companies on the impact of regulatory policy on investment and innovation is entitled to special weight since, as the D.C. Circuit has recognized, "[f]irms that sell goods and services that are inputs to the production and use of. . . services stand to gain an expanding market" from new investment and innovation and thus have an "incentive to make a completely unbiased judgment on the matter."[1]

[1] *U.S. v. Western Elec.*, 993 F.2d 1572, 1582 (D.C. Cir. 1998).

DISCUSSION

The proposed rule that is the subject of these Comments would require that "[s]ubject to reasonable network management," ISPs "treat all lawful [web] content, applications and services in a nondiscriminatory manner." Importantly, the proposed rule would prohibit all such discrimination, not just discrimination that is anticompetitive or otherwise unreasonable, on the theory that all such discrimination is inherently undesirable:

> "We note that our proposed nondiscrimination . . . rule bears more resemblance to [an] unqualified prohibition[ ] on discrimination . . . than it does to . . . [a] prohibition on 'unjust or unreasonable' discrimination . . . [because] [w]e believe that a bright-line rule against discrimination . . . may better fit the unique characteristics of the Internet . . . . [W]e propose that the nondiscrimination rule would be subject to reasonable network management, which we believe would be sufficient to address concerns that a general prohibition on discrimination lacks necessary flexibility."[2]

While the proposed rule against discrimination would not apply in a situation where discrimination was the result of "reasonable network management", it would define network management narrowly to include only those practices designed to (i) "reduce or mitigate the effects of congestion" on the ISPs network, (ii) "address quality-of-service concerns", (iii) "address traffic that is unwanted by users or harmful", (iv) "prevent the transfer of unlawful content", (v) "prevent the unlawful transfer of content", or (vi) manage the ISP's network in some "other reasonable" way.[3] ISPs would be prohibited from any other practice that results in treating any web content or service differently from any other web content or service.

We believe that the incentive to invest in ISP networks and web content and services would be harmed if the Commission were to implement its proposal barring any discrimination

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[2] Notice of Proposed Rulemaking at ¶¶ 109-110.

[3] *Id*. at ¶ 135.

unrelated to network management rather than barring unreasonable discrimination alone. Both network investment and web content and service investment would decline since the proposed rule would prohibit ISPs and web content and service providers from implementing a large variety of socially beneficial business models involving distinctive treatment of specific web content or services under which benefits exceed costs. We note that a substantial body of research shows that a nondiscrimination rule of this type likely would have a negative impact on network innovation and investment[4] and would be particularly harmful to innovation and investment in rural areas.[5]

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[4] *See, e.g.*, T. B. Lee, "The Durable Internet: Preserving Network Neutrality without Regulation", CATO Institute Policy Analysis, No. 626 (Nov. 12, 2008); D.D. Clark, "Network Neutrality: Words of Power and 800-Pound Gorillas" Int'l Journal of Comm. 701 (2007); R. E. Litan, *et al*., "Unintended Consequences of Net Neutrality Regulation", Journal on Telecom. & High Technology Law (2007); Staff of Fed. Trade Comm., "Broadband Connectivity Competition Policy" (June 2007); "R. W. Hahn et al, "The Economics of 'Wireless Net Neutrality", AEI-Brookings Joint Center for Regulatory Studies, (Ap. 2007); T. R. Beard *et al*, "Network Neutrality and Industry Structure", Hastings Comm. Ent. L.J. 149 (2007); G.S. Ford *et a*l, "Network Neutrality and Foreclosing Market Exchange: A Transaction Cost Analysis" Phoenix Center for Advanced Legal & Econ. Public Policy Studies (Mar. 2007); G.S.Ford *et al*., "The Burden of Network Neutrality Mandates on Rural Broadband Deployment", Phoenix Center for Advanced Legal & Econ. Public Policy Studies (July 2006); L. F. Darby, "Consumer Welfare, Capital Formation and Net Neutrality" at 7-8, 31 (rel. by American Consumer Institute, June 6, 2006); J.G. Sidak, "A Consumer Welfare Approach to Network Neutrality Regulations of the Internet," Journal of Comp. Law & Economics, Oxford Press, Vol. 2 No. 3 (2006); C.S.Yoo, "The Economics of Net Neutrality: Why the Physical Layer of the Internet Should Not Be Regulated", Progress on Point (Release 11.11, July 2004); B.E.Hermalin *et al.,* "The Economics of Product-Line Restrictions With an Application to the Network Neutrality Debate", AEI-Brookings Joint Center for Regulatory Studies (Feb. 2007); R.W.Hahn *et al.,* "The Myth of Network Neutrality and What We Should Do About It", Int'l Journal of Comm. 595 (2007); J.M.Peha, "The Benefits and Risks of Mandating Network Neutrality, and the Quest for a Balanced Policy", Int'l Journal of Communication 644 (2007); A.E.Kahn, "Network Neutrality", AEI-Brookings Joint Center for Reg. Studies (Mar. 2007); Comments of the Section of Antitrust Law of the American Bar Ass'n In Response to the Fed. Trade Commission's Request for Public Comment Regarding Broadband Connectivity Competition Policy at 6 (Mar. 2007). *See also* Broadband Working Group MIT Communications Futures Program, "The Broadband Incentive Problem" at 7 (Sept. 2005) (if local broadband network operators are prohibited from recovering from Internet content and application providers any portion of the costs they incur to deploy local networks, "they will be increasingly motivated to curtail rather than encourage many innovative uses of their networks"); T.M. Lenard *et al.,* "Distribution, Vertical Integration and the Net Neutrality Debate, in Net Neutrality or Net Neutering: Should Broadband Internet Service be Regulated" at 1 (The Progress & Freedom Foundation 2006) ("Broadband is a distribution business and arrangements that are not neutral with respect to the products being distributed – in this case, content and applications – are typical of distribution businesses. In fact, 'non neutral' business models are likely to be necessary to provide sufficient incentives to invest, both in content and the distribution infrastructure itself").

[5] *See, e.g.,* G.S.Ford *et al*., "The Burden of Network Neutrality Mandates on Rural Broadband Deployment", *supra*. Groups representing some rural constituencies apparently agree that network innovation could be particularly

In the following paragraphs, we offer four examples of business models that apparently would be unlawful under the proposed nondiscrimination rule because they involve an ISP treating some web content and services differently than other web content and services even though the benefits of differential treatment outweigh the costs. The only rational way to ensure that these and potentially hundreds of other business models involving differential treatment of web content and service providers in which the benefits outweigh the costs is to bar discriminatory treatment only if it is anticompetitive or otherwise unreasonable.

Example No. 1: Requiring ISPs to provide equal treatment of all web content and services apparently would make unlawful the business model that Amazon and wireless ISP Sprint have used in their pioneering effort to create a viable electronic book download and viewing market. Under that model, Amazon sells its Kindle electronic book download and viewing device to consumers for a fixed price. Amazon then pays Sprint for using the Sprint wireless network when Kindle owners shop for and download books onto their Kindles, which means Kindle owners never get a bill for their use of Sprint's wireless network.[6] It appears that this business model would be unlawful under the FCC's proposed rule since Sprint charges web service provider *Amazon* when Kindle owners use the Sprint network to shop for and download books onto their Kindles, while Sprint charges *users of its wireless network* when they use the Sprint network to download web content provided by millions of other web content and service providers. Permitting Sprint to charge Amazon for Internet usage when Amazon's Kindle

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hard hit in rural areas. See, e.g., Letter dated June 7, 2007 to FCC Commissioners from The National Grange (filed in WC Dkt. No. 07-52).

[6] Recently, Amazon and AT&"T Wireless reportedly entered into a similar arrangement for a new version of the Kindle that can be used both domestically as well as internationally. *See* "Amazon stops selling Sprint-powered Kindle", http://news.cnet.com/8301-17938_105-10381325-1.html.

owners shop for and download books onto their Kindle machines is reasonable discrimination that should not be outlawed since it appears to be helping create a viable electronic book download and viewing market by increasing the attractiveness of the Amazon book download service to consumers while causing no harm to the millions of other individuals and companies providing other web content and services.

ISP participation in the highly concentrated web content caching service market is a second example of a business that apparently would be unlawful if ISPs were required to provide equal treatment for all parties providing web content and services. ISP-provision of web caching service would be unlawful under the proposed nondiscrimination rule even though additional competition in this highly concentrated market would be beneficial and ISPs may be natural competitors. Web caching is a service that helps web content owners speed up their websites and is particularly valuable for web sites containing large stored data files, such as video. Companies provide caching service by placing duplicate copies of the web content of their caching clients on servers at hundreds of locations inside ISP networks. Today, two companies provide about 90 percent of the nationwide caching business, and one of those two, Akamai, has two-thirds of the market,[7] a market share that is expected to increase.[8] It appears that a rule requiring equal treatment by ISPs of all web content and services would have the effect of precluding ISPs from competing in the caching market since the only way they could do so while remaining consistent with that rule would be to provide caching service to *all* web sites, including those that have no need for it. This is because it appears that an ISP would violate the

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[7] www.wikinvest.com/stock/Akamai_Technologies_(AKAM) at 5.

[8] Piper Jaffrey, Research Note, Nov. 2009 (customers may "shift their . . . [caching] business increasingly towards Akamai and away from competitors in . . . [2010], stating that Akamai has room to gain additional market share. . .").

nondiscrimination rule if it were to provide caching for a fee only to content companies desiring the service. A rule that bars ISPs from entering the highly concentrated web caching market even where the social costs of entry are low would not serve the public interest because it would (i) reduce investment and innovation in broadband networks, (ii) reduce competition and thus innovation in the caching market, and (iii) hurt companies and individuals owning the type of web content that would benefit from increased competition in the caching market.

Example No. 3: It appears that requiring ISPs to treat all web content and services equally would prohibit continued use of the business model now employed by ESPN in its effort to develop a robust market for live Internet streaming of sporting events through its ESPN360 service. Under that model, ESPN permits a given ISP end user customer to access the ESPN360 service only if the customer's ISP has paid ESPN for the service. ESPN's decision to charge ISPs for the ESPN360 service appears to benefit consumers by permitting ESPN to provide the service to all customers of that ISP without imposing a direct charge on those consumers. Without revenue from ISPs, ESPN would be forced to find another way to recover its costs, such as by imposing a direct charge on end users desiring to receive ESPN360. Charging consumers a fee to access ESPN360 could make it difficult for ESPN to continue providing the service to the detriment of Web content and service innovation by reducing the ESPN360 user base since it appears that the only way an ISP could make the service available to its customers under such a rule would be for the ISP to pay <u>all</u> web content and service providers given that paying ESPN without paying the owners of all other Web content and services would result in preferential treatment of ESPN *vis-à-vis* the owners of other Web content and services. Since an ISP could not economically justify paying the tens of millions of individuals and companies that own web content and service, the ISP would have no choice than not to pay for ESPN360 either, thereby

denying all web content owners, including ESPN, the ability to use the ESPN360 business model and making the Internet experience potentially less valuable for consumers to the detriment of innovation and future investment in both broadband networks as well as web content and services.

One final example of the negative impact that could result from a rule requiring ISPs to treat all web content and services in the same way is that it apparently would arbitrarily prohibit every company that provides cable TV service from competing in the new and rapidly growing online video business regardless of whether the benefits of entry by that company outweigh the costs. Recently, numerous companies have launched online video services using various business models. For example, Hulu (whose owners include Disney, News Corp. and NBC Universal) provides advertising-supported service, and publicly-owned Netflix provides a subscription-based service. Another participant in the online video service market, Sling Media, offers an inventory of more than 1,500 TV episodes and movies on its sling.com website, and it also sells a device called Slingbox which permits a cable TV customer to watch, free of charge over the Internet, all cable TV channels he receives at home. Some ISPs that provide cable service reportedly are planning to compete in this burgeoning online video programming market by offering huge amounts of programming online to their cable subscribers free of charge. Unfortunately, it appears that a rule requiring these ISPs to treat all web content owners equally would have the effect of arbitrarily banning them from this new and rapidly growing online video market since it appears that providing their cable customers free online access to a large library of video content would be unlawful without undertaking the impossibly complex task of identifying each of the millions of videos owned by hundreds of thousands of different parties that are available on the Internet and then providing free access to that entire library. A rule that

arbitrarily precludes an ISP from entering the online video service market in a manner in which the benefits outweigh the risks would reduce competition (and thus innovation) in that market and slow investment in broadband networks.

CONCLUSION

If the Commission believes a rule barring ISP discrimination is desirable, the rule should not prohibit both reasonable and unreasonable discrimination as the agency has proposed, but instead should bar unreasonable discrimination alone. Outlawing reasonable discrimination would negatively affect innovation and investment in ISP networks as well as in web content and services as we have illustrated above by looking at four concrete examples of businesses that apparently would be needlessly outlawed if reasonable discrimination is barred.

Respectfully submitted,

ADC Telecommunications
Berry Test Sets, Inc.
BTECH Inc.
Camiant, Inc.
CBM of America, Inc.
Condux International, Inc.
Enhanced Telecommunications, Inc.
FiberControl
Independent Technologies Inc.
MetroTel, Inc.
MRV Communications, Inc.
NSG America, Inc.
Omnitron Systems Technology, Inc.
PECO II, Inc.
Positron Access Solutions
Prysmian Communications Cables and Systems USA, LLC
Sheyenne Dakota, Inc.
SNC Manufacturing Company Inc.

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